

IN THE CLAIMS

1.-19. (Cancelled without prejudice or disclaimer)

20. (Previously presented) A method for fabricating the micro-mirror which comprises wherein further comprising the steps of:

a mirror section for reflecting an incident light;

a hinge section including a fixed section and a movable section each having a flat surface;

a drive means having a bi-morph structure made of two or more of materials having different heat expansion coefficient for deflecting said mirror section of a relative angle to said incident light; wherein

said hinge section and the mirror section are integrally constructed by a structured film formed on a semiconductor substrate by utilizing crystal anisotropy of said semiconductor substrate;

said movable section of the hinge section is so formed as to be continuous from said fixed section of the hinge section and is formed so as to construct a bent slanting surface at an extended section of the fixed section of the hinge section;

forming a first groove having a first skewed surface at a side wall section on a front surface of said semiconductor substrate, and a second groove having a second skewed surface substantially parallel to said first skewed surface of the first groove at a position and opposite to a flat surface section around said first groove on a back surface of said semiconductor substrate;

forming structured films at said first skewed surface of the first groove and said flat surface section around said first groove;

forming a first drive film at one surface of said structured film;

forming said mirror section and said hinge section made of the structured film by removing said semiconductor substrate with etching process after performing a through-hole etching of said semiconductor substrate to make one end of said structured film to be a free end at a bottom section of said first groove; and

forming a second drive film on another surface of the structured film constructing said hinge section;

forming a metal film on said structured film constructing said mirror section and the hinge section; and

forming a reflection film and an electrode pad for supplying current to said reflection film by selectively etching said metal film.

21. (Previously presented) The method for fabricating the micro-mirror of claim 20, wherein

a patterned photo-resist obtained by patterning the photo-resist film uniformly formed in thickness by the spray method by projection exposure apparatus is used as a mask upon forming said reflection mirror and the electrode pad.

22.-26. (Cancelled without prejudice or disclaimer)